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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,549	06/30/2000	ALBRECHT MAYER	P00.0665	8828

26574 7590 06/27/2005

SCHIFF HARDIN, LLP
PATENT DEPARTMENT
6600 SEARS TOWER
CHICAGO, IL 60606-6473

EXAMINER

CRAIG, DWIN M

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/530,549

Applicant(s)

MAYER, ALBRECHT

Examiner

Dwin M Craig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4-4-2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 16-28 have been presented for reconsideration based on Applicant's amended claims and Applicant's Request for Continued Examination under 37 CFR 1.114.

Response to Arguments

2. Applicant's arguments with respect to claims 16-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. **Claims 16-28** are rejected under 35 USC 102(a) as being anticipated by **Linke et al. U.S. Patent 5,960,188**.

3.1 As regards independent **Claims 16 and 28** and using Independent **Claim 28** as an example,

The *Linke et al.* reference teaches *a simulation system of a micro controller including the peripherals (Col. 15 lines 32-50 note lines 33 and 34 with the phrase cycle-based simulator being developed for the purpose of testing embedded software on a microcontroller), predetermined signal patterns (Figure 1 and Col. 10 lines 9-27 note the discussion of the output information this would be in the form of a stimulus, which is the functional equivalent of a signal*

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pattern), a first series of steps and a second series of steps and markers (Figure 3A item 38, Figure 4 items 100, and 101, Col. 11 lines 53-67 and Col. 12 lines 1-4 note the phrase on line 55 of column 11, The method begins by first asking (100) whether the Change Marker data is zero, or some other value that refers to the in which a New Level, functional equivalent of Step, or New Strength, functional equivalent of a new pattern, was asserted functional equivalent of "INPUT", on the wire.) a control unit (Col. 15 line 42 the SUN SPARCstation is the control unit for the simulation) with clock cycle accuracy (Col. 5 lines 45-61), and program instruction interrupted by an instruction set simulator (Col. 4 lines 61-67 and Col. 5 lines 1-18).

3.2 As regards dependent Claims 17-27 please see (Figures 4-8b) and Col. 11 lines 54-67, Col. 12, Col. 13, Col. 14 and Col. 15 lines 1-31. It is noted by the Examiner that these drawings and the flow charts, including the discussion therein, disclose control mechanism used to arbitrate the co-simulation of signals within the microcontroller software/hardware simulation (Col. 6 lines 14-25), as described in Applicant's dependent Claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Examiner has included a list of Patent and non-patent literature, which provides useful back round disclosures directly related to the co-simulation of hardware and software in embedded systems.

4.1 Claims 16-28 have been presented for reconsideration. Claims 1-15 have been cancelled. Claims 16-28 have been rejected. This Office Action is **Non-Final**.

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4.2 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwain M Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (571)272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC

DMC
W. Turner
TC 2100
Per 2123
Primary Examiner